

James Cai (#200189)
Brian A. Barnhorst (#130292)
Kat C. Kazemi (#225006)
SAC ATTORNEYS LLP
1754 Technology Dr., Suite 122
San Jose, California 95110
Telephone: (408) 436-0789
bbarnhorst@sacattorneys.com
Attorneys for Plaintiff,
ADVANCED ENGINEERING SERVICES, LLC

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

ADVANCED ENGINEERING SERVICES,
LLC, a California limited liability company,

Plaintiff,

vs.

LUMASENSE TECHNOLOGIES, INC.; and
DOES 1-50, inclusive,

Defendants.

Case No. 21-cv-03279-WHO

Consolidated with:
*LumaSense Technologies, Inc., v. Advanced
Engineering Services, LLC*
Case No. 3:20-cv-07905-WHO

FOURTH AMENDED COMPLAINT

- 1) Breach of Contract**
- 2) Breach of the Implied Covenant of
Good Faith and Fair Dealing**
- 3) Intentional Interference with
Prospective Economic Relations**
- 4) Breach of Fiduciary Duty**

Comes now the Plaintiff, ADVANCED ENGINEERING SERVICES, LLC, and alleges as follows:

PARTIES AND JURISDICTION

1. Plaintiff, ADVANCED ENGINEERING SERVICES, LLC (“Plaintiff” or “AES”), is a California limited liability company in good standing, located at all times relevant hereto in Santa Clara County, California. Its founder and president is Akhil Seth (“Seth”).¹

2. Defendant LUMASENSE TECHNOLOGIES, INC. (“LumaSense”) is a Delaware corporation authorized to do business and doing business, in California, with its principal place of business, during all times relevant, in Santa Clara County, California.

3. DOES 1-50 are other individuals and/or entities who aided, participated in, ratified, or are otherwise responsible for the wrongful acts of herein whose identities in any potential wrongdoing are presently unknown to Plaintiff. One or more DOES 1-10 are residents of California or California-based businesses or entities doing business in California. Plaintiff makes all of its allegations in this Complaint against DOES 1-50; where such allegations are not made with personal knowledge as to DOES 1-50, they are made upon information and belief. Plaintiffs will seek leave to amend this Complaint to allege the true names of DOES 1-50 once the same are ascertained.

4. Plaintiff is informed and believed, and thereon alleges, that, at all times relevant herein, each and every defendant was an agent, principal, employee, employer, successor in interest, or joint venture of each of the remaining defendants and was at all times acting within the course and scope of such agency, employment, partnership, joint venture, and/or each defendant has engaged in, ratified, approved, benefitted from, or authorized the acts of each of the remaining defendants with full knowledge of said acts.

5. This Court has personal jurisdiction over each of the named defendants.

6. The Court assumed jurisdiction over this action pursuant to 28 U.S.C. § 1367 and consolidated it with LumaSense’s pending action (see Docket # 45, 56).

¹ Between 2005 and 2014, Seth did business through Advanced Engineering Solution, Inc., which was abandoned in 2014 in favor of Advanced Engineering Services, LLC. For the sake of simplicity, unless the context dictates or suggests otherwise, the two entities and Seth will be referred to herein collectively as “AES”.

INTRODUCTION AND COMMON FACTS

7. AES (see footnote 1) provides a variety of engineering and integration services, including identifying existing technologies that might be modified for different or more specialized uses. Starting as early as 2005, AES provided consulting services to industry leaders such as Applied Materials (“AMAT”)² and Lam Research (“Lam”)³ regarding thermal, gas, and flow sensing for use in designing and manufacturing equipment used in semiconductor chip manufacturing. In particular, Plaintiff correlated the *simulation* of finite element analysis (“FEA”) and computational fluid dynamics (“CFD”) data for gases, temperature, and stress with *actual* sensor data that could be intelligently integrated, customized, installed, tested, verified, and validated.

8. AES’s *raison d’être* was and is to identify the needs of potential customers, to work with companies such as LumaSense to add value to their existing products as well as to develop new products, and to integrate and sell such augmented products to those customers.

9. AES had expended a great deal of money, time, and effort to cultivate certain companies as its customers; as such, the identity of those companies, the personal contacts within them, and the companies’ specific engineering and business requirements, were all proprietary business information of Plaintiff.

10. Additionally, AES had dedicated an extensive amount of time and resources toward working with those companies to determine their needs and then developing value-added products to suit those needs. Both that information so acquired and the value-added products developed in response were proprietary and confidential information of AES.

11. Beginning in or about 2014, AES applied its expertise to modify a fiber-optic thermal (“FOT”) sensor manufactured by a Canadian company called Osensa Innovations Corp. so that it could be used by makers of semiconductor equipment manufacturers. The sensor was

² “Applied Materials, Inc. is an American corporation that supplies equipment, services and software for the manufacture of semiconductor (integrated circuit) chips” https://en.wikipedia.org/wiki/Applied_Materials

³ “Lam Research Corporation is an American corporation that engages in the design, manufacture, marketing, and service of semiconductor processing equipment used in the fabrication of integrated circuits.” https://en.wikipedia.org/wiki/Lam_Research

highly proprietary and not available on the general market. It became unavailable when Osensa was acquired by Watlow Electric Manufacturing Co.

12. AES enjoyed relationships with several customers—including AMAT and Lam—who had particularized needs for such sensors if those sensors could be improved upon and reconfigured to the specifications and tolerances required for those customers’ anticipated uses. Those relationships arose from and were nurtured over several years by AES’s consulting work on product integration, stress and thermal sensing, relationships that LumaSense recognized and wished to capitalize on.

13. Over time, AES had become familiar with the particular needs of those customers; AES’s niche in the market was and is to re-engineer, enhance, and re-package inferior products such as LumaSense’s then-existing sensors for the benefit of AES’s customers.

14. In or around 2014, LumaSense had several models of temperature and gas sensors, including two products—an FOT sensor and a non-dispersive infra-red (“NDIR”) sensor—that were of limited industrial use and not able to be used by companies such as AMAT and Lam.

15. AES recognized the potential for enhanced versions of multiple sensor products including the FOT and NDIR sensors for use by companies such as AMAT and Lam, and therefore approached LumaSense about the idea of collaborating to create and develop new sensor products for that market.

THE VALUE-ADDED RESELLER AGREEMENT

16. On June 12, 2014, Plaintiff entered into a Value-Added Reseller Agreement with LumaSense (the “Agreement”).⁴ By the terms of that Agreement, AES was granted the right to buy existing hardware sensor products and develop new products and to enhance existing products, a license to integrate LumaSense’s sensors (referred to in the Agreement as “Original

⁴ “A value-added reseller (VAR) is a company that adds features or services to an existing product, then resells it (usually to end-users) as an integrated product or complete “turn-key” solution. This practice occurs commonly in the electronics or IT industry, where, for example, a VAR might bundle a software application with supplied hardware. [¶] The added value can come from professional services such as integrating, customizing, consulting, training and implementation. The value can also be added by developing a specific application for the product designed for the customer’s needs which is then resold as a new package. VARs incorporate platform software into their own software product packages.” https://en.wikipedia.org/wiki/Value-added_reseller

Hardware”) into new products (referred to as a “VAR Product” or a “VAR Customized Product”), and the *exclusive* right to sell those new products to nine customers specifically identified therein (as well as other customers later agreed to in writing), which included AMAT and Lam.

17. Section 1.3 of the Agreement provides in part (emphasis added) that Plaintiff “shall retain the *exclusive ownership* and all rights, title and interest, including but not limited to copyright, patent, trademarks, trade secrets, and all other intellectual property rights, in any and all of the know-how, ideas, technology, procedures, solutions, software, general utility programs, codes, libraries, software tools, techniques, algorithms, and concepts developed by VAR” Similar language in Section 1.3 of the Agreement protected LumaSense’s intellectual property.

18. Section 1.3 further provides (emphasis added): “Company & VAR shall retain the *joint ownership* and all rights; title and interest, including but not limited to copyright, patent, trademarks, trade secrets, and all other intellectual property rights, in any and all the of the know-how, ideas, technology, procedures, Solutions, software, general utility programs, codes, libraries, software tools, techniques, algorithms, and concepts *jointly developed by Company & VAR*.”

19. Section 2.3 required Plaintiff to cooperate with LumaSense in protecting that property, and to notify LumaSense of any unauthorized use of the Original Hardware. LumaSense was not obligated to take legal action against any infringer, but Plaintiff was entitled to do so, and LumaSense was obligated to cooperate with Plaintiff in any such endeavor.

20. In inartfully drafted Section 2.4, Plaintiff further agreed to “assist Company in protecting the distribution of the Original Hardware from unlawful duplication.”

21. Under Section 2.5, Plaintiff owned the copyright and other protections with regard to packaging, advertising, and promotional materials for Plaintiff’s value-added products.

22. Section 2.1 contained a type of good faith and best efforts clause, imposing on Plaintiff the obligation to “use reasonable commercial efforts to develop, promote, commercialize, market, sell and support the VAR Customized Product throughout the term of this Agreement.”

23. Section 3.1 obligated LumaSense to assist Plaintiff in fulfilling Plaintiff's obligations under 2.1, "including furnishing technical, marketing, and other support as VAR reasonably requests, including the technical tools, software, and training to allow VAR to promote, sell, and support the VAR Customized Product successfully."

24. Relatedly, Section 3.2 required that LumaSense direct all inquiries and support issues regarding Plaintiff's products to Plaintiff.

25. Section 3.3 prohibited LumaSense from selling its products, to which Plaintiff would add value, to anyone but Plaintiff: "Company shall sell its Original Hardware to VAR under separate part numbers to VAR. Company shall not sell the VAR product parts to anyone else without VAR's express written authorization. Either Company or VAR can sell Company standard products to VAR's customers."

26. Section 3.5 expounds on that point, stating: "Company shall make limited hardware or firmware changes to differentiate the VAR products from Company's generic products depending on end customer's demand and requirement"

27. Section 4.4. states: "Company agrees not to disclose the hardware or firmware changes that Company has made to differentiate the VAR products from Company's generic products, as set forth in Paragraph 3.5."

28. Section 4.1 acknowledges that, during the course of their business relationship, each party will be exposed to highly proprietary, sensitive, and confidential information relating to the other: "Each party acknowledges that it may be provided with information about, and during the course of this Agreement will be brought into close contact with many confidential affairs of the other party, including proprietary information about operational methods, technical processes, business affairs and methods, plans for future development, and other information not readily available to the public. All such information is highly confidential and proprietary."

29. With regard to this confidential information, subsection 4.1(b) provides that neither party will "make use of any of such confidential matters for its own purposes"

//////

//////

JOINT VENTURE

30. Despite the recitation in Section 15.1 that the Agreement “does not constitute a partnership or joint venture between Company and VAR”, the relationship between Plaintiff and LumaSense was not merely that of buyer and seller; rather, they were joint venturers with regard to the value-added products that were anticipated by the Agreement.⁵

31. As noted above (see ¶ 18), Section 1.3 provides in part that AES and LumaSense would retain *joint ownership* as to all things *jointly developed* by them.

32. Additionally, Section 6.1 of the Agreement states in part: “VAR and Company shall *jointly* develop an appropriate warranty for the VAR Customized Product.”

33. Each joint venturer had its distinct obligations under Section 6.1: “VAR shall have responsibility for responding to all technical support inquiries and warranty claims relating to the VAR Customized Product. Company shall provide VAR personnel with reasonable training, such technical information, current maintenance documentation, and assistance to enable VAR to provide adequate support services to customers. Company shall provide VAR notice of upgrades, identified problems, and technical letters to VAR in a timely fashion.”

34. Additionally, Section 3.1 obligated LumaSense to assist Plaintiff in fulfilling Plaintiff’s obligations under 2.1 (a type of good faith and best efforts clause, imposing on Plaintiff the obligation to “use reasonable commercial efforts to develop, promote, commercialize, market, sell and support the VAR Customized Product throughout the term of this Agreement”), “including furnishing technical, marketing, and other support as VAR reasonably

⁵ This action began in state court (*Advanced Engineering Services, LLC v. LumaSense Technologies, Inc.*; Santa Clara County Superior Court case number 18CV333646). LumaSense twice demurred to AES’s complaint on the ground that, inter alia, this language precluded a claim for breach of fiduciary duty; twice its demurrer was overruled on that ground. In her order dated August 6, 2019, Judge Mary E. Arand stated (emphasis): “**It is readily apparent Plaintiff’s theory is that Lumasense breached their agreement (particularly Section 4.1 [a confidentiality provision; see AES Complaint at ¶¶ 29-30]) by using [AES’s] proprietary information in a manner inconsistent with the purpose for which it was disclosed and then profiting from that conduct by selling directly to consumers in violation of its promise to give AES the exclusive right to do so . . .**” In her order dated February 11, 2020, she stated (citations and internal quotation marks omitted, emphasis): “**Whether a joint venture actually exists depends on the intention of the parties. This intention may be discerned from an agreement or their conduct and may be found to exist notwithstanding an express declaration to the contrary. In other words, the intent of the parties as to their rights and interests—the fundamental characteristics of their relationship—control, not the characterization or denomination of their relationship.**”

1 requests, including the technical tools, software, and training to allow VAR to promote, sell, and
2 support the VAR Customized Product successfully.”

3 FOT SENSORS

4 35. The manufacturing of semiconductor chips involves high temperatures and very
5 tight tolerances. In the process of manufacturing semiconductor chips, an electrostatic chuck is
6 used in a harsh (high temperature, low pressure) environment.

7 36. Specifically, during the manufacturing process of semiconductors, the
8 temperature needs to be constantly monitored to an extremely high level of accuracy. A
9 temperature sensor that is in physical contact with any surface near the electrostatic chuck will
10 melt or otherwise be destroyed.

11 37. The temperature level at the chuck can be monitored through the use of fiber optic
12 temperature sensors.

13 38. Because of its existing relationship with AMAT and Lam, AES knew their
14 particularized needs with regard to FOT sensors in the chip manufacturing process.

15 39. Pursuant to the VAR Agreement, AES and LumaSense agreed to jointly develop a
16 line of products to be sold under the “FOT Next” product line.

17 40. In reliance on this understanding and agreement that the FOT Next product line
18 would be a joint undertaking, AES prepared confidential product proposals for AMAT, AKT,
19 and Lam Research.

20 41. AES, using its knowledge of sensor technology, the wants and needs of potential
21 customers, and LumaSense’s existing rudimentary FOT sensors, jointly developed a state-of-the-
22 art product that companies like AMAT and Lam could incorporate into their equipment.
23 LumaSense subsequently breached the Agreement by cutting out AES and selling the jointly
24 developed FOT sensors directly to VAR Customers identified in the Agreement as those to
25 whom Plaintiff was to be the exclusive reseller.

26 /////

27 /////

28 /////

Communications with AMAT/AKT Regarding FOT Products

42. Beginning on or about July 9, 2014, after the VAR Agreement was signed, AES initiated contact with AMAT on behalf of AES and LumaSense regarding AMAT's potential interest in FOT products to be jointly developed by AES and LumaSense.

43. Seth had developed a good relationship with AMAT and Lam; LumaSense had either no relationship at all, or a terrible relationship, with specific critical groups within AMAT and Lam, and Seth had to work hard to convince the relevant management of those companies to work with LumaSense and to reconsider its existing and new technology.

44. On or about August 14, 2014, Seth, on behalf of AES, followed up with Eric Wallace, a manager at LumaSense, emphasizing the importance of nurturing and maintaining a relationship with AMAT and Lam.

45. During October and November of 2014, Seth and representatives of LumaSense entered into discussions regarding the joint development of an enhanced FOT product that would become the FOT Next. Seth shared with LumaSense information about fiber optic sensor products that AES was selling to its customers, and about those customers' particular needs in that regard.

46. On or about December 9, 2014, Seth, on behalf of AES, sent an email to LumaSense emphasizing AES's commitment to support AMAT with manufacturing target production orders for FOT products.

47. On or about February 11, 2015, Seth sought—and obtained—assurances from a representative of LumaSense (Ron Sutton) that technical information shared with LumaSense would be kept confidential and LumaSense would not seek to contact VAR customers directly.

48. With those assurances from LumaSense, AES sent confidential technical material to LumaSense that AES was using to promote sensor technology. AES also developed a marketing strategy for the FOT products focused on AES's connections, including preparing a proposal for AMAT in April of 2015 for the AES/LumaSense FOT Next customized sensors.

/////

/////

49. In May of 2015, LumaSense, in violation of the VAR Agreement, initiated direct communications with AKT/AMAT.⁶ Nevertheless, in late May, based on LumaSense's assurances that it would abide by the VAR Agreement, representatives of AKT/AMAT, AES, and LumaSense met to discuss the FOT products being jointly developed.

50. Once AES had established the relationship between LumaSense and AKT/AMAT, LumaSense excluded AES from its further efforts regarding the FOT Next products. In February of 2016, LumaSense advised that it would "have to get clarification" as to whether the FOT Next line of products was a VAR Product. The FOT Next product line was not launched until August 6, 2018.

51. Under the terms of the VAR Agreement, the FOT Next line of products most assuredly *was* a VAR Product. Plaintiff is informed and believes and, based thereon, alleges that the FOT Next line of products is a successful one, and that the sales of those products to AKT/AMAT, Lam, and other VAR Customers are believed to be at least \$12,000,000 or more annually.

/////

/////

/////

/////

⁶ On May 14, 2015, Seth sent the following email to Ron Sutton, the Vice President of Marketing and Sales of LumaSense at the time: "It has been brought to my attention that LumaSense has been entertaining Business discussions with AKT (AMAT) that is totally unacceptable and breaching the agreement that is in place. I have been transparent with LumaSense regarding AKT and other Businesses and issues we face. Please find below email trails from the August 2014 when these issues were discussed and AES was promised 16 Channels to be delivered to AKT as a replacement for old technology that never happened. [¶] It has been almost a year and has greatly affected my relationship and Business with AKT because of not delivering the working product on time. In good faith with LumaSense, I discontinued my Business relationship with our previous vendor (Osensa) as their probes could not withstand the pull force and their Semiconductor division was sold to another company. Multiple companies approached me to sell and support their sensor technology to different OEM's. I refused to engage in any Business relationship with other vendors as agreement was in place with LumaSense and I developed a good working relationship with your team members. I even arranged multiple meetings within few weeks with top executives at Lam Research, AMAT, ASML and Aixtron to promote LumaSense products with our services. [¶] It is very disappointing to learn that your team is having possible direct Business discussions with Tune San behind my back while I am in India. I would appreciate if I am the only point of contact with my customers to avoid any confusion. I am putting my 100% to win Business and get LumaSense good margins but not at cost of losing my Business relationship. [¶] Hopefully LumaSense and AES will abide by the agreement in place. I have relayed the same message to Ichi and Tune san, we need to provide them with 16 channel working probes and converter to qualify." No one from LumaSense ever responded to this email.

Communications with Lam Research Regarding FOT Products

52. During August of 2015, Seth, on behalf of Plaintiff, initiated contacts with Lam Research, a VAR Customer.

53. Lam Research had previously been a customer of LumaSense, but the relationship had deteriorated. LumaSense was eager to resurrect it, as Lam Research is a potentially high-volume customer for a company like LumaSense.

54. On August 19, 2015, Seth prepared a confidential proposal for Lam Research regarding selling and integrating the jointly developed FOT Next product line. This proposal was based on confidential information shared with AES by Lam.

55. On August 30, 2015, an initial meeting occurred among Plaintiff, Lam Research, and LumaSense, coordinated by Seth.

56. On September 18, 2015, Seth sent an email to LumaSense setting forth his plan for re-establishing business relations between LumaSense and Lam Research.

57. In September and October of 2015, Seth sought to set up a line of communication between LumaSense and Lam Research. On behalf of the joint venture between Plaintiff and LumaSense, Seth started a conversation with Lam regarding the use of the next generation of FOT products being co-developed by LumaSense and AES. Lam had a need for such products if they met Lam's stringent technical requirements. At that time, though, LumaSense had severely damaged its relationship with Lam, and Lam had no interest in pursuing further business relationships with LumaSense.

58. Over the course of two years, Seth worked to resurrect LumaSense's relationship with Lam. Seth facilitated and arranged multiple meetings between LumaSense personnel and members of Lam's engineering, supply-chain, and management teams. Just as Plaintiff and LumaSense had worked together to pitch the FOT Next line to AKT/AMAT, Plaintiff and LumaSense worked together to develop an FOT Next product for sale to Lam. By July of 2017, the relationship had been mended and, in August of 2017, LumaSense was offering to Lam the FOT Next products that AES and LumaSense were jointly developing. The FOT Next was actually released by LumaSense in August of 2018.

59. Under the provisions of the VAR Agreement, Lam was a VAR Customer, and Plaintiff had the exclusive right to sell to Lam VAR Products such as the FOT Next product line.

60. Plaintiff would not have provided prototypes, product designs, or product concepts to LumaSense but for (i) the fact that LumaSense had signed the VAR Agreement, which gave Plaintiff the exclusive to right to sell VAR products to VAR customers like Lam, and (ii) LumaSense's obligation under the Agreement not to misappropriate Plaintiff's product designs or technology.

THE NDIR PRODUCT

61. In his discussions with various companies, Seth had identified a need for a gas sensor for use in the manufacturing of semiconductors.

62. Seth was aware that LumaSense manufactured an NDIR sensor that was, at the time, used almost exclusively to detect CO₂ emissions during automobile smog checks; however, semiconductor manufacturing required the detection of several different gases.

63. In or about October of 2015, AES pitched to AMAT's senior personnel the idea of upgrading the LumaSense NDIR sensor so that it could detect the several different gases as required for semiconductor manufacturing.

64. AES developed specifications and system architecture, as well as hardware, firmware, and software specifications for an enhanced NDIR product based on AMAT's needs and future requirements. In or about November of 2015, AES demonstrated for AMAT the then-existing LumaSense NDIR sensor, and laid out a roadmap for the development of new NDIR technology that would require one-time engineering efforts ("non-recurring engineering" or "NRE") and time to develop.

65. The NDIR sensor being discussed was clearly subject to the VAR Agreement, and AES understood that it would be involved in the product development and any NDIR product would be a VAR Product with ownership rights jointly owned by Plaintiff and LumaSense.

66. It was Plaintiff's exclusive right under the Agreement to add value to one of LumaSense's existing products and then to resell that value-added product; Plaintiff possessed

1 the technical expertise and resources necessary to accomplish this with regard to the NDIR, and
 2 LumaSense did not.

3 67. Initially, LumaSense's technology and management teams declined to take up the
 4 project, advising AES that LumaSense did not have enough bandwidth and resources. Doug
 5 Goodwin of LumaSense passed along a response he had received on November 2, 2015, from
 6 Gregor Hsiao, saying "we are way off with our current NDIR product. This would be a major
 7 engineering project." Goodwin advised Seth to tell AMAT that "it's not something we currently
 8 do nor do we plan on doing this. Thanks for the opportunity and if something in our portfolio
 9 changes, we will let them know."

10 68. AES persisted in continuing to pursue the opportunity with AMAT, even
 11 obtaining a commitment from AMAT for \$580,000 of up-front NRE money to develop the new
 12 NDIR technology. In an email on November 3, 2015, he explained the AES/LumaSense
 13 partnership and how the two companies could meet AMAT's business and engineering needs.

14 69. On December 17, 2015, Seth sent another email to Goodwin of LumaSense
 15 regarding AMAT's continued interest in the NDIR technology. Goodwin did not respond.

16 70. In violation of its fiduciary duty and in breach of the VAR Agreement,
 17 LumaSense continued to falsely represent to AES that it was not interested in the development
 18 project; however, LumaSense fraudulently concealed that it in fact had accepted the NRE
 19 money—which was supposed to have gone to AES to develop the new VAR product—and,
 20 using the specifications, system architecture, hardware, firmware, and software specifications
 21 provided by AES, developed the advanced NDIR product for AMAT.

22 71. Since usurping this opportunity, LumaSense has made millions of dollars selling
 23 those NDIR sensors to AMAT and others, depriving Plaintiff of even the exclusive right under
 24 the Agreement to resell the enhanced NDIR to AMAT, which was an identified VAR customer.

25 **FIRST CAUSE OF ACTION**

26 **Breach of Contract**

27 72. Plaintiff incorporates and realleges by this reference the allegations of the
 28 foregoing paragraphs 1-71 as if set forth in full herein.

1 73. The VAR Agreement was a valid and existing contract between Plaintiff and
2 LumaSense.

3 74. Plaintiff performed all acts required of it pursuant to the terms of the Agreement,
4 except to the extent that its performance was frustrated or prevented by LumaSense.

5 75. By engaging in the acts complained of herein, LumaSense breached the
6 Agreement.

7 76. As a direct and proximate result of LumaSense's conduct as alleged herein,
8 Plaintiff has been damaged in an amount to be proven at trial, but believed to be in excess of
9 \$10,000,000.

10 **SECOND CAUSE OF ACTION**

11 **Breach of the Implied Covenant of Good Faith and Fair Dealing**

12 77. Plaintiff incorporates and realleges by this reference the allegations of the
13 foregoing paragraphs 1-76 as if set forth in full herein.

14 78. The VAR Agreement was a valid and existing contract between Plaintiff and
15 LumaSense.

16 79. There is implied in every contract, including the Agreement, a covenant of good
17 faith and fair dealing, such that neither party will deprive the other of the benefits due under the
18 contract.

19 80. By engaging in the conduct complained of herein, LumaSense breached that
20 implied covenant of good faith and fair dealing.

21 81. As a direct and proximate result of LumaSense's conduct as alleged herein,
22 Plaintiff has been damaged in an amount to be proven at trial, but believed to be in excess of
23 \$10,000,000.

24 **THIRD CAUSE OF ACTION**

25 **Breach of Fiduciary Duty**

26 82. Plaintiff incorporates and realleges by this reference the allegations of the
27 foregoing paragraphs 1-81 as if set forth in full herein.

28 /////

83. By virtue of, *inter alia*, the interdependent nature of the relationship between AES and LumaSense as set forth in the Agreement, particularly sections 1.3 (joint ownership), 2.1 (AES's obligation to develop and promote value-added products for the benefit of LumaSense), 3.1 (LumaSense's obligation to assist and cooperate with Plaintiff's performance its obligations under 2.1), and 6.1 (joint development of warranty), a Joint Venture existed by and between AES and LumaSense with regard to the specific projects referenced herein.

84. Because such a Joint Venture existed, a fiduciary relationship existed between them such that LumaSense, together with its agents, officers, and employees, owed to AES a fiduciary duty of utmost trust and confidence. Each was duty bound to act with the highest loyalty toward AES and with the utmost regard for protection of AES's interests in relation to the Joint Venture. As joint venturers, LumaSense owed statutory and common law fiduciary duties to AES and the Joint Venture (1) to act in good faith and in the best interests of the Joint Venture; (2) to not misappropriate proprietary and confidential information AES shared with LumaSense for its own benefit; (3) to speak truthfully in all matters related to the Joint Venture, and to disclose to AES all material facts related thereto; and (4) to not usurp for its own benefit any opportunities or profits which belong to the Joint Venture.

85. By virtue of the parties' Joint Venture and the explicit provisions of the Agreement—including but not limited to at sections 1.3 and 4—the parties mutually agreed that, although they would share certain data and information, both would regard and maintain all such shared data as confidential and proprietary, to be protected from disclosure and misappropriation.

86. In reliance on the parties' Joint Venture and the explicit provisions of the Agreement as set forth above, AES shared with LumaSense its highly confidential and proprietary information for the development of enhanced sensor products—*viz.*, AES's operational methods, technical processes and know-how, and product proposals that included studied and tested temperature ranges, fluorescent signal levels, system requirements for probes, converter specifications, and pricing analysis. AES also shared direct contact information of key personnel for prospective VAR Customers, such as AMAT and Lam, as to which LumaSense

1 had no existing business relationship, as well as their detailed technology needs for enhanced
2 customized sensor product solutions.

3 87. By virtue of the parties' Joint Venture and the explicit provisions of the
4 Agreement, AES was entitled to be the exclusive seller to identified VAR Customers of the FOT
5 sensors jointly developed with LumaSense, including the jointly developed products in the FOT
6 Next product line.

7 88. By virtue of the parties' Joint Venture and the explicit provisions of the
8 Agreement, AES was entitled to be the exclusive seller to identified VAR Customers of the
9 jointly developed NDIR sensors, including products sold to VAR Customer AMAT that
10 incorporated product configurations and designs that AES had provided to LumaSense.

11 89. AES consistently sought and obtained assurances from LumaSense that technical
12 information shared with LumaSense would be kept confidential and LumaSense would not seek
13 to contact VAR customers directly.

14 90. With those assurances from LumaSense, AES provided to LumaSense
15 confidential technical material that AES was using to promote sensor technology. Consistent
16 with the terms of the Agreement (at section 2.1), AES also developed a marketing strategy for
17 the FOT products focused on AES's connections, including preparing proposals for AMAT and
18 Lam in 2015 for the AES/LumaSense FOT Next customized sensors.

19 91. In or about February of 2016, consistent with the terms of the Agreement and
20 LumaSense's obligations thereunder, AES contacted LumaSense seeking pricing proposals and
21 discounts of FOT products in order to sell VAR FOT products to VAR customers.

22 92. After establishing a business relationship with AKT/AMAT, LumaSense
23 purposefully excluded AES from any further efforts regarding the FOT Next products.
24 LumaSense's position was that AES had no exclusive right under the VAR Agreement; instead,
25 LumaSense, in a letter dated April 8, 2015, from Nate Wilcox, offered AES a discounted
26 buy/resell structure. Wilcox concluded the letter by saying (emphasis added): "LumaSense
27 strongly believes that the buy/resell discount structure noted above represents *an equitable*
28 *valuation for the effort involved in winning and maintaining the AKT business over time.* We

1 look forward to working with you and the AES team to move this opportunity with AKT to the
2 next stage and to achieving a confirmed win with volume purchases over a long time frame.” In
3 other words, LumaSense was not going to abide by the VAR Agreement, but did recognize
4 AES’s contribution and offered this structure instead.

5 93. LumaSense failed to disclose that it was actively marketing FOT Next products to
6 VAR customers, specifically AKT/AMAT and Lam Research, in violation of the Agreement, the
7 Joint Venture, and LumaSense’s fiduciary duty to AES.

8 94. By March of 2016, for no legitimate reason, in violation of the Agreement, and in
9 breach of its fiduciary duty, LumaSense cut off AES’s involvement in the product development
10 process.

11 95. As alleged herein, LumaSense confirmed in or about September of 2016 that it
12 was communicating and working directly with AMAT to develop new NDIR technology to the
13 exclusion of AES. LumaSense’s conduct in this regard not only amounted to a breach of
14 fiduciary duty, but was also in direct breach of the Agreement.

15 96. Having secured access to AES’s confidential and proprietary information,
16 LumaSense proceeded to breach the Agreement, the implied obligations of good faith and fair
17 dealing, and its fiduciary duty under the Joint Venture, by abandoning all efforts to jointly
18 develop a VAR Product and completely shutting AES out of the process.

19 97. LumaSense abandoned the Joint Venture and usurped its opportunities so that it
20 could develop its own enhanced sensor products using AES’s confidential and proprietary
21 information. Excluding AES allowed LumaSense to develop and sell the enhanced sensor
22 products without having to designate or recognize them as a “VAR Product”, thereby depriving
23 AES of any profit that it would otherwise be entitled to pursuant to the Agreement and their Joint
24 Venture.

25 98. Using AES’s confidential and proprietary information, LumaSense continued to
26 develop and subsequently sold enhanced FOT Next sensor products, thereby depriving AES of
27 the exclusive right to resell the enhanced sensor products to VAR and non-VAR Customers.

28 /////

1 99. Using AES's confidential and proprietary information, LumaSense also usurped
2 the opportunity relating to the NDIR sensor product, arrogating to itself the development fee
3 provided by AMAT, cutting AES out of all discussions with AMAT, and ultimately developing
4 and selling to AMAT an enhanced version of the NDIR, thereby depriving AES of even the
5 exclusive right under the Agreement to resell the enhanced NDIR to AMAT. LumaSense failed
6 to disclose that it had taken advantage of product development money from AMAT, and it
7 excluded AES from the product development discussions related to the NDIR product.

8 100. By engaging in the conduct complained of herein, LumaSense breached its
9 fiduciary duty to Plaintiff by failing to disclose to Plaintiff complete and accurate information
10 regarding all matters related to the Joint Venture.

11 101. By engaging in the conduct complained of herein, and by their secret ploy to
12 deprive AES of its rights, property, and both actual and prospective economic relations, as
13 alleged herein, LumaSense breached its fiduciary duty to Plaintiff, causing extreme and
14 oppressive prejudice and harm to AES.

15 102. Just one week after AES commenced this action against LumaSense in Santa
16 Clara County Superior Court, LumaSense retaliated by wrongfully disassociating from the Joint
17 Venture and prematurely terminating the Agreement, in direct breach of the Agreement at, inter
18 alia, Sections 8.1 and 19.1. LumaSense unilaterally withdrew from the Joint Venture before the
19 expiration of the term of the Agreement and before the completion of the particular purpose of
20 the Joint Venture. As such, its disassociation from the Joint Venture is wrongful under
21 California Corporations Code § 16602(b) and in further breach of its fiduciary duty to AES.

22 103. As a direct and proximate result of LumaSense's conduct, Plaintiff was harmed in
23 an amount to be proven at trial, but believed to be in excess of \$10,000,000.

24 104. LumaSense's conduct as alleged herein was a substantial factor in causing
25 Plaintiff's harm.

26 105. In engaging in the conduct as alleged herein, LumaSense acted willfully with
27 oppression, fraud, or malice, entitling Plaintiff to an award of punitive damages from
28 LumaSense.

FOURTH CAUSE OF ACTION

Intentional Interference with Prospective Economic Relations

106. Plaintiff AES incorporates and realleges by this reference the allegations of the foregoing paragraphs 1-105 as if set forth in full herein.

107. As herein alleged, economic relationships with the likelihood of future economic benefit to Plaintiff existed between Plaintiff and companies listed in section 1.4 of the Agreement; indeed, AES had been providing services to many of the VAR customers for more than a decade.

108. As herein alleged, LumaSense had knowledge of those economic relationships.

109. In engaging in the conduct as alleged herein, LumaSense intended to disrupt and interfere with those economic relationships, or knew that such disruption and interference were certain or substantially certain to occur.

110. LumaSense's conduct as alleged herein was wrongful independent of the fact of the disruption and interference itself, including but not limited to the fact that its conduct was fraudulent and a violation of its fiduciary duty to AES.

111. In engaging in the conduct as alleged herein, LumaSense deprived Plaintiff of the opportunity to enjoy the benefits of reselling to those companies.

112. As a direct and proximate result of LumaSense's conduct, Plaintiff was harmed in an amount to be proven at trial, but believed to be in excess of \$10,000,000.

113. LumaSense's conduct as alleged herein was a substantial factor in causing Plaintiff's harm.

114. In engaging in the conduct as alleged herein, LumaSense acted with oppression, fraud, or malice, entitling Plaintiff to an award of punitive damages from LumaSense.

PRAYER

Plaintiff therefore prays for judgment as follows:

1. For damages according to proof;
2. For punitive damages;
3. For restitution;

4. For reasonable attorney's fees and costs;
5. For such other and further relief as is appropriate.

Date: February 22, 2022

SAC ATTORNEYS LLP

Brian A. Barnhorst

James Cai, Esq.

Brian A. Barnhorst, Esq.

Kat C. Kazemi, Esq.

Attorneys for Plaintiff,

ADVANCED ENGINEERING SERVICES, LLC

PROOF OF SERVICE Electronic Filing

I HEREBY CERTIFY that on February 23, 2022, I electronically filed the foregoing:

FOURTH AMENDED COMPLAINT

with the Clerk of Court by using the CM/ECF system which will send a notice of electronic filing to all attorneys of record.

/s/ Brian A. Barnhorst
Brian A. Barnhorst